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Docket No.: 52-025

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ND-21-0757 10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission **Document Control Desk** Washington, DC 20555-0001

> Southern Nuclear Operating Company Vogtle Electric Generating Plant Unit 3 ITAAC Closure Notification on Completion of ITAAC 2.2.04.02a [Index Number 220]

#### Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.2.04.02a [Index Number 220]. This ITAAC requires inspections, tests, and analyses be performed and documented to ensure the Steam Generator System (SGS) components and piping listed in the Combined License (COL) Appendix C, Table 2.2.4-1 and Table 2.2.4-2 that are identified as American Society of Mechanical Engineers (ASME) Code Section III, Leak Before Break (LBB), or Functional Capability Required are designed and constructed in accordance with applicable requirements. The closure process for this ITAAC is based on the guidance described in Nuclear Energy Institute (NEI) 08-01, Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52, which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli A. Roberts at 706-848-6991.

Respectfully submitted,

Michael).

Michael J. Yox

Regulatory Affairs Director Vogtle 3 & 4

Enclosure:

Vogtle Electric Generating Plant (VEGP) Unit 3

Completion of ITAAC 2.2.04.02a [Index Number 220]

MJY/JRV/sfr

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# Southern Nuclear Operating Company ND-21-0757 Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3 Completion of ITAAC 2.2.04.02a [Index Number 220] U.S. Nuclear Regulatory Commission ND-21-0757 Enclosure Page 2 of 13

#### **ITAAC Statement**

#### **Design Commitment:**

- 2.a) The components identified in Table 2.2.4-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements.
- 2.b) The piping identified in Table 2.2.4-2 as ASME Code Section III is designed and constructed in accordance with ASME Code Section III requirements.
- 3.a) Pressure boundary welds in components identified in Table 2.2.4-1 as ASME Code Section III meet ASME Code Section III requirements.
- 3.b) Pressure boundary welds in piping identified in Table 2.2.4-2 as ASME Code Section III meet ASME Code Section III requirements.
- 4.a) The components identified in Table 2.2.4-1 as ASME Code Section III retain their pressure boundary integrity at their design pressure.
- 4.b) The piping identified in Table 2.2.4-2 as ASME Code Section III retains its pressure boundary integrity at its design pressure.
- 5.b) Each of the lines identified in Table 2.2.4-2 for which functional capability is required is designed to withstand combined normal and seismic design basis loads without a loss of its functional capability.
- 6. Each of the as-built lines identified in Table 2.2.4-2 as designed for LBB meets the LBB criteria, or an evaluation is performed of the protection from the dynamic effects of a rupture of the line.

#### Inspections, Tests, Analyses:

Inspection will be conducted of the as-built components and piping as documented in the ASME design reports.

Inspection of the as-built pressure boundary welds will be performed in accordance with the ASME Code Section III.

A hydrostatic test will be performed on the components and piping required by the ASME Code Section III to be hydrostatically tested.

Inspection will be performed for the existence of a report verifying that the as-built piping meets the requirements for functional capability.

Inspection will be performed for the existence of an LBB evaluation report or an evaluation report on the protection from dynamic effects of a pipe break. Section 3.3, Nuclear Island Buildings, contains the design descriptions and inspections, tests, analyses, and acceptance criteria for protection from the dynamic effects of pipe rupture.

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#### Acceptance Criteria:

The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.2.4-1 and 2.2.4-2 as ASME Code Section III.

A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

A report exists and concludes that the results of the hydrostatic test of the components and piping identified in Tables 2.2.4-1 and 2.2.4-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

A report exists and concludes that each of the as-built lines identified in Table 2.2.4-2 for which functional capability is required meets the requirements for functional capability.

An LBB evaluation report exists and concludes that the LBB acceptance criteria are met by the as-built SGS piping and piping materials, or a pipe break evaluation report exists and concludes that protection from the dynamic effects of a line break is provided.

### **ITAAC Determination Basis**

This ITAAC requires inspections, tests, and analyses be performed and documented to ensure the Steam Generator System (SGS) components and piping listed in the Combined License (COL) Appendix C, Table 2.2.4-1 (Attachment A) and Table 2.2.4-2 (Attachment B) that are identified as American Society of Mechanical Engineers (ASME) Code Section III, Leak Before Break (LBB), or Functional Capability Required are designed and constructed in accordance with applicable requirements.

2.a and 2.b) The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.2.4-1 and 2.2.4-2 as ASME Code Section III.

Each component listed in Table 2.2.4-1 as ASME Code Section III is fabricated in accordance with the VEGP Updated Final Safety Analysis Report (UFSAR) and the ASME Code Section III requirements . The ASME Code Section III certified Design Reports for these components exist and document that the as-built components conform to the approved design details. The ASME Section III Design Report for each component was documented in the component's completed ASME Section III Code Data Report. The individual component ASME Section III Code Data Reports are documented on the ASME Section III N-5 Code Data Report(s) for the applicable piping system (Reference 1).

The as-built piping listed in Table 2.2.4-2 including the components listed in Table 2.2.4-1 as ASME Code Section III, were subjected to a reconciliation process (Reference 2), which verifies that the as-built piping are analyzed for applicable loads (e.g. stress reports) and for compliance with all design specification and Code provisions. Design reconciliation of the as-built systems, including installed components, validates that construction completion, including field changes and any nonconforming condition dispositions, were consistent with and bounded by the approved design. All applicable fabrication, installation and testing records, as well as, those for the related Quality Assurance (QA) verification/ inspection activities, which confirm adequate construction in compliance with the ASME Code Section III and design provisions, are referenced in the N-5 data report and/or its sub-tier references.

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The applicable ASME Section III N-5 Code Data Report(s), which include the location of the certified Design Reports for all the components listed in Table 2.2.4-1 (Attachment A) and piping listed in Table 2.2.4-2 (Attachment B) as ASME Code Section III, exist and conclude that these installed components were designed and constructed (including their installation within the applicable as-built piping system) in accordance with the ASME Code (1998 Edition, 2000 Addenda and 1989 Edition, 1989 Addenda), Section III requirements as applicable, as described in UFSAR Subsection 5.2.1 (Reference 3). The N-5 Code Data Reports for the piping system(s) containing the components listed in the Table 2.2.4-1 and Table 2.2.4-2 are identified in Attachments A and B, respectively.

3.a and 3.b) A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds.

Inspections were performed in accordance with ASME Code Section III (1998 Edition, 2000 Addenda) to demonstrate that as-built pressure boundary welds in components identified in Table 2.2.4-1 as ASME Code Section III met ASME Code Section III requirements (i.e., no unacceptable indications).

The applicable non-destructive examinations (including liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by ASME Code Section III) of the components' pressure boundary welds were documented in the Non-destructive Examination Report(s), which support completion of the respective ASME Section III N-5 Code Data Report(s) certified by the Authorized Nuclear Inspector, as listed in Attachment A.

Per ASME Code Section III, Subarticle NCA-8300, "Code Symbol Stamps," the N-5 Code Data Report(s) (Reference 1) documents satisfactory completion of the required examination and testing of the item, which includes non-destructive examinations of pressure boundary welds. Satisfactory completion of the non-destructive examination of pressure boundary welds ensures that the pressure boundary welds in components identified in Table 2.2.4-1 as ASME Code Section III met ASME Code Section III requirements.

An inspection was performed in accordance with Reference 2 to demonstrate that the as-built pressure boundary welds in piping identified in Table 2.2.4-2 (Attachment B) as ASME Code Section III met ASME Code Section III requirements (i.e., no unacceptable indications). This portion of the ITAAC was complete when the piping identified in Table 2.2.4-2, which was encompassed within the respective piping system Code Symbol N-Stamp and the corresponding piping system Code N-5 Data Report Form(s) (Reference 1), was completed. The nondestructive examinations (including visual inspection, liquid penetrant, magnetic particle, radiographic, and ultrasonic testing, as required by ASME Code Section III) of the piping pressure boundary welds were documented in the Non-destructive Examination Report(s) within the piping system's supporting data package, which support completion of the respective Code Stamping and Code N-5 Data Report(s). The completion of stamping the respective piping system along with the corresponding ASME Code N-5 Data Report Form(s) (certified by the Authorized Nuclear Inspector) ensure that the piping was constructed in accordance with the design specification(s) and the ASME Code Section III and that the satisfactory completion of the non-destructive examinations of piping pressure boundary welds for the pipe lines identified in Table 2.2.4-2 met ASME Code Section III requirements and were documented in the Nondestructive Examination Report(s) within the supporting data packages.

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4.a and 4.b) A report exists and concludes that the results of the hydrostatic test of the components and piping identified in Tables 2.2.4-1 and 2.2.4-2 as ASME Code Section III conform with the requirements of the ASME Code Section III.

A hydrostatic test was performed by the vendor to demonstrate that the components identified in Table 2.2.4-1 (Attachment A) as ASME Code Section III retain their pressure boundary integrity at their design pressure. The completion of the N-5 Data Reports was governed by Reference 2.

This portion of the ITAAC was complete once each component identified in Table 2.2.4-1 had their individual Code Symbol N-Stamp and corresponding Code Data Report (Reference 1) completed, and the components were installed into the respective Code Symbol N-Stamped piping system and documented on the corresponding N-5 Code Data Report(s) (Reference 1). The hydrostatic testing results of the component's pressure boundary were documented in the Hydrostatic Testing Report(s) within the supporting component's data package, which support completion of the respective Code Stamping and Code Data Report(s).

The completion of stamping the individual components and the respective piping system along with the corresponding ASME Code Data Reports (certified by the Authorized Nuclear Inspector) ensured that the components were constructed in accordance with the Design Specifications and the ASME Code Section III and that the satisfactory completion of the hydrostatic pressure testing of each component identified in Table 2.2.4-1 as ASME Code Section III were documented in the Hydrostatic Testing Report(s) within the supporting data packages and met ASME Code Section III requirements.

This ITAAC also verifies that the piping identified in Table 2.2.4-2 (Attachment B) fully meets all applicable ASME Code, Section III requirements and retains its pressure boundary integrity at its design pressure.

Hydrostatic tests were performed in accordance with procedures identified in Reference 1 (as applicable) that complies with the ASME Code (1998 Edition, 2000 Addenda), Section III requirements to demonstrate that the ASME Code Section III piping identified in Table 2.2.4-2 retains its pressure boundary integrity at its design pressure.

A hydrostatic test verified that there were no leaks at welds or piping, and that the pressure boundary integrity was retained at its design pressure. The hydrostatic testing results of the pipe lines are documented in the Hydrostatic Testing Report(s). The Hydrostatic Testing Report(s) supports completion of the ASME Section III N-5 Code Data Report(s) for the applicable piping system (i.e., SGS) (Reference 1).

The applicable ASME Section III N-5 Code Data Report(s) (Reference 1) identified in Attachments A and B documents that the results of the hydrostatic testing of the components and piping identified in Table 2.2.4-1 and Table 2.2.4-2 respectively conform with the requirements of the Code (1998 Edition, 2000 Addenda), Section III.

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5.b) A report exists and concludes that each of the as-built lines identified in Table 2.2.4-2 for which functional capability is required meets the requirements for functional capability.

An inspection was performed of the ASME Section III as-built piping design report (Reference 4) to verify that the report demonstrates that each of the SGS piping lines identified in ITAAC Table 2.2.4-2 that requires functional capability are designed to withstand combined normal and seismic design basis loads without a loss of its functional capability. "Functional capability," in this context, refers to the capability of the piping to withstand the effects of earthquakes, without a loss of safety function (to convey fluids from one location to another). Specific functional capability requirements are defined in the VEGP UFSAR Table 3.9-11 (Reference 3).

Piping functional capability is not a specific ASME Code requirement but it is a requirement in the VEGP UFSAR (Reference 3). As such, information demonstrating that UFSAR functional capability requirements are met is included in the ASME Section III As-Built Design Reports for safety class piping prepared in accordance with ASME Section III NCA-3550 under the ASME Boiler & Pressure Vessel Code (1998 Edition, 2000 Addenda) Section III requirements. The asbuilt piping systems were subjected to a reconciliation process (Reference 2), which verifies that the as-built piping systems were analyzed for functional capability and for compliance with the design specification and ASME Code provisions. Design reconciliation of the as-built systems validates that construction completion, including field changes and any nonconforming condition dispositions, are consistent with and bounded by the approved design. As required by ASME Code, the As-Built Design Report includes the results of physical inspection of the piping and reconciliation to the design pipe stress report.

Inspections of the ASME Code Section III As-Built Piping Design Reports (Reference 4) for the SGS piping lines identified in Table 2.2.4-2 were completed and conclude that each of the asbuilt SGS piping lines for which functional capability were required met the requirements for functional capability. The ASME Section III As-Built Piping Design Reports for each of the asbuilt SGS piping lines in Table 2.2.4-2 are identified in Attachment B.

6. An LBB evaluation report exists and concludes that the LBB acceptance criteria are met by the as-built SGS piping and piping materials, or a pipe break evaluation report exists and concludes that protection from the dynamic effects of a line break is provided.

Inspections were performed for the as-built lines identified in Table 2.2.4-2 (Attachment B) to verify that each of the as-built lines designed for LBB met the LBB criteria, or an evaluation was performed of the protection from the dynamic effects of a rupture of the line. VEGP COL Appendix C, Section 3.3, Nuclear Island Buildings, contains the design descriptions and inspections, tests, analyses, and acceptance criteria for protection from the dynamic effects of pipe rupture.

LBB evaluations were performed as described in UFSAR subsection 3.6.3 to confirm that the as-built SGS piping (and corresponding piping materials) identified in Attachment A met the LBB acceptance criteria described in the UFSAR, Appendix 3B, Leak-Before-Break Evaluation of the AP1000 Piping (Reference 3). In cases where an as-built SGS piping line in Attachment B cannot meet the LBB acceptance criteria, a pipe break evaluation was performed which concludes that protection from the dynamic effects of a line break were provided. The pipe break evaluation criteria was discussed in UFSAR, Section 3.6.4.1, Pipe Break Hazards Analysis (Reference 3) and were documented as a pipe rupture hazards analysis report (pipe break evaluation report).

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Inspections were performed to verify that LBB as-built piping evaluation reports for the SGS piping (and corresponding piping materials) identified in Attachment B conclude that the as-built piping analysis is bounded by the applicable bounding analysis curves provided in Appendix 3B of the UFSAR (Reference 3). The results were documented in either the applicable ASME Section III as-built piping design report(s) or in separate LBB evaluation report(s). For cases where an as-built SGS piping line in Attachment B cannot meet the LBB acceptance criteria, inspections were performed to verify that a pipe rupture hazards analysis evaluation report (pipe break evaluation report) exists which concludes that protection from the dynamic effects of a line break were provided.

The applicable ASME Section III as-built piping design report(s), LBB evaluation report(s), or pipe rupture hazards analysis report(s) (pipe break evaluation report(s)) exist and are identified in Attachment B.

References 1 and 4 provide the evidence that the following ITAAC Acceptance Criteria requirements are met:

- The ASME Code Section III design reports exist for the as-built components and piping identified in Tables 2.2.4-1 and 2.2.4-2 as ASME Code Section III;
- A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds;
- A report exists and concludes that the results of the hydrostatic test of the components and piping identified in Tables 2.2.4-1 and 2.2.4-2 as ASME Code Section III conform with the requirements of the ASME Code Section III;
- A report exists and concludes that each of the as-built lines identified in Table 2.2.4-2 for which functional capability were required met the requirements for functional capability; and
- An LBB evaluation report exists and concludes that the LBB acceptance criteria were
  met by the as-built SGS piping and piping materials, or a pipe break evaluation
  report exists and concludes that protection from the dynamic effects of a line break
  were provided.

This ITAAC also verified that a Preservice Inspection (PSI) for the applicable portions of the Class 2 and 3 Steam Generator System (SGS) components and piping identified in Tables 2.2.4-1 and 2.2.4-2 were completed (Reference 7), in accordance with the Unit 3 PSI program plan, (Reference 5), and that the results of the PSI conforms with the requirements of the ASME Boiler and Pressure Vessel (B&PV) Code.

References 1 and 4 are available for NRC inspection as part of the Unit 3 ITAAC 2.2.04.02a Completion Package (References 6).

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#### **ITAAC Finding Review**

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review, which included now consolidated ITAAC Indexes 221, 222, 223, 224, 225, 229, and 230, found no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.2.04.02a (Reference 6) and is available for NRC review.

#### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.2.04.02a was performed for VEGP Unit 3 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

## References (available for NRC inspection)

- 1. SV3-SGS-MUR-001, Rev. 0, "AP1000 Vogtle Unit 3 ASME Section III System Code Data Report for the Steam Generator System (SGS)"
- 2. APP-GW-GAP-139, Rev. 7, "Westinghouse/Stone & Webster ASME Code Data Report As-Built Documentation Interface Procedure"
- 3. VEGP 3&4 Updated Final Safety Analysis Report, Rev. 10.1:
  - a. Subsection 5.2.1 Compliance with Codes and Code Cases,
  - b. Table 3.9-11 Piping Functional Capability ASME Class 1, 2, and 3,
  - c. Subsection 3.6.3 Leak before Break Evaluation Procedures
  - d. Subsection 3.6.4.1- Pipe Break Hazards Analysis
  - e. Appendix 3B Leak-Before-Break Evaluation of the AP1000 Piping
- 4. SV3-SGS-S3R-001, Rev. 0, "Vogtle Unit 3 Steam Generator System (SGS) ASME III As-Built Piping System Design Report"
- 5. SV3-GW-GEI-100, Rev. 2, "AP1000 Preservice Inspection Program Plan for Vogtle Unit 3"
- 6. 2.2.04.02a-U3-CP-Rev0, ITAAC Completion Package
- 7. APE-10-00017, "Unit 3 Completion of Preservice Inspection for SGS Class 2, and 3 Portions of Systems"
- 8. SV3-SGS-P0R-0302, Rev. 1, "AP1000 Piping for APP-SGS-PLR-030 Vogtle Unit 3 ASME III As-Built Design Report"
- 9. SV3-SGS-P0R-0402, Rev. 1, "AP1000 Piping for APP-SGS-PLR-040 Vogtle Unit 3 ASME III As-Built Design Report"

# Attachment A

	Γ		T	***	
Equipment Name*			ASME III as- built Design Report	N-5 Report	
Main Steam Safety Valve SG01	SGS-PL-V030A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG02	SGS-PL-V030B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG01	SGS-PL-V031A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG02	SGS-PL-V031B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG01	SGS-PL-V032A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG02	SGS-PL-V032B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG01	SGS-PL-V033A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG02	SGS-PL-V033B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG01	SGS-PL-V034A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG02	SGS-PL-V034B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG01	SGS-PL-V035A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Safety Valve SG02	SGS-PL-V035B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Power-operated Relief Valve Block Motor-operated Valve Steam Generator 01	SGS-PL-V027A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Power-operated Relief Valve Block Motor-operated Valve Steam Generator 02	SGS-PL-V027B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Steam Line Condensate Drain Isolation Valve	SGS-PL-V036A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Steam Line Condensate Drain Isolation Valve	SGS-PL-V036B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Line Isolation Valve	SGS-PL-V040A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Line Isolation Valve	SGS-PL-V040B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Steam Line Condensate Drain Control Valve	SGS-PL-V086A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Steam Line Condensate Drain Control Valve	SGS-PL-V086B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	

## **Attachment A**

Equipment Name*	Tag No.*	ASME Code Section III*	ASME III as- built Design Report	N-5 Report	
Main Feedwater Isolation Valve	SGS-PL-V057A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Feedwater Isolation Valve	SGS-PL-V057B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Startup Feedwater Isolation Motor-operated Valve	SGS-PL-V067A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Startup Feedwater Isolation Motor-operated Valve	SGS-PL-V067B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Steam Generator Blowdown Isolation Valve	SGS-PL-V074A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Steam Generator Blowdown Isolation Valve	SGS-PL-V074B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Steam Generator Blowdown Isolation Valve	SGS-PL-V075A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Steam Generator Blowdown Isolation Valve	SGS-PL-V075B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Power-operated Relief Valve	SGS-PL-V233A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Power-operated Relief Valve	SGS-PL-V233B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Isolation Valve Bypass Isolation	SGS-PL-V240A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Steam Isolation Valve Bypass Isolation	SGS-PL-V240B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Feedwater Control Valve	SGS-PL-V250A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Feedwater Control Valve	SGS-PL-V250B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Startup Feedwater Control Valve	SGS-PL-V255A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Startup Feedwater Control Valve	SGS-PL-V255B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Feedwater Thermal Relief Valve	SGS-PL-V257A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Main Feedwater Thermal Relief Valve	SGS-PL-V257B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Startup Feedwater Thermal Relief Valve	SGS-PL-V258A	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	
Startup Feedwater Thermal Relief Valve	SGS-PL-V258B	Yes	SV3-SGS-S3R- 001	SV3-SGS-MUR-001	

<sup>\*</sup>Excerpts from COL Appendix C Table 2.2.4-1

## **Attachment B**

	Т						<del></del>
Line Name*	Line No.*	ASME Code Section III*	Leak Before Break*	Functional Capability Required*	ASME III As-Built Design Report	LBB evaluation / pipe break evaluation	N-5 Report
Main Feedwater Line	SGS-PL- L002A, L002B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Main Feedwater Line	SGS-PL- L003A, L003B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Startup Feedwater Line	SGS-PL- L004A, L004B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Startup Feedwater line	SGS-PL- L005A, L005B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Main Steam Line (within containment)	SGS-PL- L006A, L006B	Yes	Yes	Yes	SV3- SGS- S3R-001	SV3-SGS- P0R-0302 & SV3-SGS- P0R-0402 - No Impact on Archived Analysis	SV3- SGS- MUR- 001
Main Steam Line (outside of containment)	SGS-PL- L006A, L006B	Yes	No	Yes	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Main Steam Line	SGS-PL- L007A, L007B	Yes	No <sub>.</sub>	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001

# **Attachment B**

Line Name*	Line No.*	ASME Code Section III*	Leak Before Break*	Functional Capability Required*	ASME III As-Built Design Report	LBB evaluation / pipe break evaluation	N-5 Report
Safety Valve Inlet Line	SGS-PL- L015A, L015B, L015C, L015D, L015E, L015F, L015H, L015J, L015K, L015L, L015M	Yes	No	Yes	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Safety Valve Discharge Line	SGS-PL- L018A, L018B, L018C, L018B, L018E, L018F, L018H, L018J, L018K, L018L, L018M	Yes	No	Yes	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Power-operated Relief Block Valve Inlet Line	SGS-PL- L024A, L024B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Power-operated Relief Valve Inlet Line	SGS-PL- L014A, L014B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Main Steam Isolation Valve Bypass Inlet Line	SGS-PL- L022A, L022B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001

# Attachment B

Line Name*	Line No.*	ASME Code Section III*	Leak Before Break*	Functional Capability Required*	ASME III As-Built Design Report	LBB evaluation / pipe break evaluation	N-5 Report
Main Steam Isolation Valve Bypass Outlet Line	SGS-PL- L023A, L023B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Main Steam Condensate Drain Line	SGS-PL- L021A, L021B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Steam Generator Blowdown Line	SGS-PL- L009A, L009B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001
Steam Generator Blowdown Line	SGS-PL- L027A, L027B	Yes	No	No	SV3- SGS- S3R-001	· N/A	SV3- SGS- MUR- 001
Steam Generator Blowdown Line	SGS-PL- L010A, L010B	Yes	No	No	SV3- SGS- S3R-001	N/A	SV3- SGS- MUR- 001

<sup>\*</sup>Excerpts from COL Appendix C, Table 2.2.4-2